

Wirewound Resistors, Industrial Power, Vitreous Coated, Adjustable Edgewound Tubular


FEATURES

- High temperature vitreous coating
- Complete welded construction
- Tight tolerance of 5 % for values above 1 Ω
- Excellent stability in operation (< 3 % change in resistance)
- Material categorization:

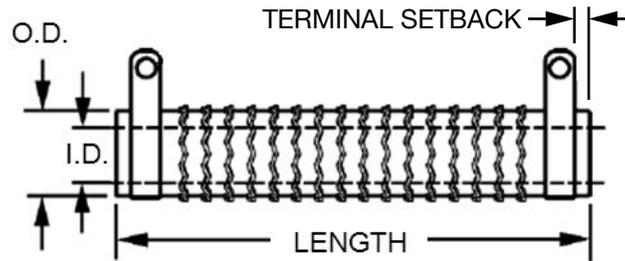
For definitions of compliance please see www.vishay.com/doc?99912



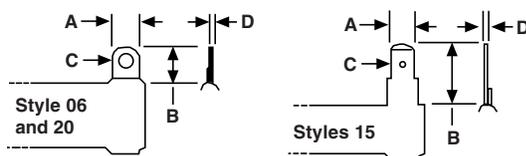
RoHS
COMPLIANT
HALOGEN
FREE
GREEN
(5-2008)

STANDARD ELECTRICAL SPECIFICATIONS					
GLOBAL MODEL	HISTORICAL MODEL	POWER RATING $P_{25\text{ }^\circ\text{C}}$ W	RESISTANCE RANGE Ω $\pm 5\%$	RESISTANCE RANGE Ω $\pm 10\%$	WEIGHT (typical) g
AVE0050	AVE-50	50	1.0 to 3.8	1.0 to 3.8	18
AVE0100	AVE-100	100	1.0 to 6.1	0.15 to 6.1	41
AVE0110	AVE-110	110	1.0 to 7.4	0.20 to 7.4	49
AVE0120	AVE-120	120	1.0 to 8.6	0.1 to 8.6	54
AVE0155	AVE-155	155	1.0 to 12.5	0.1 to 12.5	129
AVE0240	AVE-240	240	1.0 to 18	0.1 to 18	186
AVE0300	AVE-300	300	1.0 to 25	0.15 to 25	236
AVE0375	AVE-375	375	1.0 to 32	0.20 to 32	286
AVE0420	AVE-420	420	1.0 to 35.8	0.25 to 35.8	320

GLOBAL PART NUMBER INFORMATION						
Global Part Numbering example: AVE030020E15R0KE92 (visit www.vishay.net SAP parts manual for all options)						
A	V	E	0	3	0	0
2	0	E	1	5	R	0
K	E	9	2			
GLOBAL MODEL (7 digits)	TERMINAL DESIGNATION (2 digits)	TERMINAL FINISH (1 digit)	VALUE (4 digits)	TOLERANCE (1 digit)	PACKAGING CODE (1 digit)	SPECIAL (up to 2 digits)
(See Standard Electrical Specifications Global Model column for options)	06 15 20	E = Lead (Pb)-free	R = Decimal K = Thousand 1R50 = 1.5 Ω 1K50 = 1.5 k Ω	J = $\pm 5\%$ K = $\pm 10\%$	E = E01 = Lead (Pb)-free skin pack	(Dash number) From 1 to 99 as applicable 91 = 100 style horizontal thru-bolt bracket 92 = 200 style push-in bracket 93 = 300 style vertical thru-bolt bracket
Historical Part Number example: AVE-300-15-10%-BKTS						
AVE-300	15 Ω	10 %	BKTS			
HISTORICAL MODEL	RESISTANCE VALUE	TOLERANCE	SPECIAL			

DIMENSIONS in inches [millimeters]


MODEL	DIMENSIONS in inches [millimeters]							
	CORE DIMENSIONS			TERMINAL SETBACK	DISTANCE BETWEEN TERMINALS (REF.)	TERMINAL DESIGNATION		BRACKET TYPES
	LENGTH	O.D.	I.D.			STANDARD	OPTIONAL (QUICK CONNECT)	
AVE0050	2.000 [50.8]	0.750 [19.05]	0.500 [12.70]	0.086 [2.18]	1.328 [33.73]	06	15	101, 203, 301
AVE0100	3.500 [88.90]	0.750 [19.05]	0.500 [12.70]	0.079 [2.01]	2.842 [72.19]	06	15	102, 206, 303
AVE0110	4.000 [101.6]	0.750 [19.05]	0.500 [12.70]	0.125 [3.18]	3.250 [82.55]	06	15	102, 206, 303
AVE0120	4.500 [114.3]	0.750 [19.05]	0.547 [13.89]	0.125 [3.18]	3.750 [95.25]	06	15	102, 206, 303
AVE0155	4.500 [114.3]	1.125 [28.58]	0.750 [19.05]	0.282 [7.16]	3.436 [87.27]	20	15	103, 205, 303
AVE0240	6.500 [165.1]	1.125 [28.58]	0.750 [19.05]	0.250 [6.35]	5.376 [136.6]	20	15	103, 205, 303
AVE0300	8.500 [215.9]	1.125 [28.58]	0.750 [19.05]	0.267 [6.78]	7.342 [186.5]	20	15	103, 205, 303
AVE0375	10.500 [266.7]	1.125 [28.58]	0.750 [19.05]	0.266 [6.76]	9.344 [237.3]	20	15	103, 205, 303
AVE0420	11.375 [288.9]	1.125 [28.58]	0.750 [19.05]	0.266 [6.76]	10.219 [259.6]	20	15	103, 205, 303

TERMINAL DIMENSIONS


DIMENSIONS	TERMINAL STYLE		
	06	15	20
A	0.250 [6.35]	0.250 [6.35]	0.375 [9.53]
B	0.563 [14.29]	0.594 [15.08]	0.625 [15.88]
C (HOLE DIAMETER)	0.166 [4.22]	0.065 [1.65]	0.196 [4.98]
D	0.020 [0.51]	0.031 [0.79]	0.020 [0.51]

TECHNICAL SPECIFICATIONS		
PARAMETER	UNIT	AVE RESISTOR CHARACTERISTICS
Temperature Coefficient	ppm/°C	± 260 for 20 Ω and above, ± 400 for 1 Ω to 19.99 Ω, special TC's available please contact factory
Short Time Overload	-	10 x rated power for 5 s
Dielectric Withstanding Voltage	V _{AC}	1000, from terminal to mounting hardware
Maximum Working Voltage	V	$(P \times R)^{1/2}$
Operating Temperature Range	°C	- 55 to + 350



MATERIAL SPECIFICATIONS

Element: Copper-nickel alloy or nickel-chrome alloy, depending on resistance value

Core: Ceramic, steatite or cordierite

Coating: Special high temperature vitreous

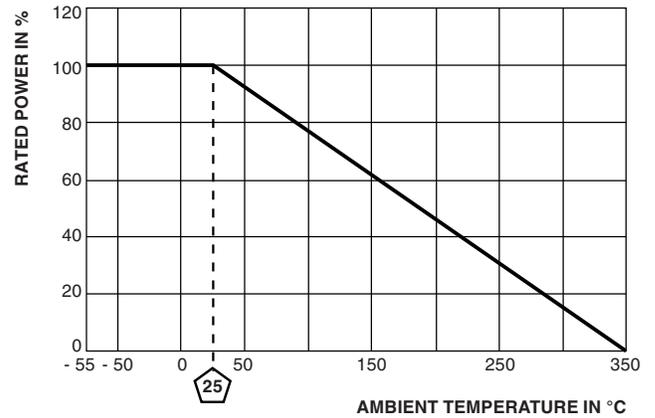
Standard Terminals: Tinned alloy 42

Optional Terminals (Quick Connect): Alloy 42

Terminal Bands: Alloy 42

Part Marking: HEI, model, wattage, value, tolerance, date code

DERATING





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